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FOREIGN

MARCH
1959

AGRICULTURE



Philippine abaca in U.S. rope factory

Monetary Freedom in Europe
West Africa's Changing Geography
Our Fiber Imports



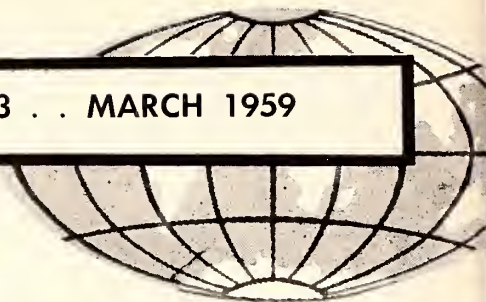
UNITED STATES DEPARTMENT OF AGRICULTURE • FOREIGN AGRICULTURAL SERVICE

FOREIGN

AGRICULTURE

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To report and interpret world
agricultural developments.



Food for Peace

The United States has followed a consistent policy of being generous with its agricultural abundance. Millions of needy families, millions of school children, are better nourished today—both in the United States and abroad—because of this generosity.

Now perhaps even more can be done. There is a new concept—the concept of “Food for Peace,” which the President voiced in his recent farm message to Congress:

“Food can be a powerful instrument for all the free world in building a durable peace. We and other surplus-producing nations must do our very best to make the fullest constructive use of our abundance of agricultural products to this end. These past four years our special export programs have provided friendly food-deficit nations with four billion dollars’ worth of farm products that we have in abundance. I am setting steps in motion to explore anew with other surplus-producing nations all practical means of utilizing the various agricultural surpluses of each in the interest of reinforcing peace and the well-being of friendly peoples through the world—in short, using food for peace.”

The new Food for Peace program is getting under way. It holds promise for greater cooperation between nations. It can mean that more people can share in the world’s agricultural abundance.

Cover Photograph

Steel hackle pins comb abaca fiber into a compact and silky sliver for spinning into yarn. Abaca is the preferred fiber for rope-making. See story on page 4. (Photograph courtesy of the Columbian Rope Company.)

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Economic Progress Increases Monetary Freedom In Europe

By Dale K. Vining
International Monetary Branch
Foreign Agricultural Service

In a dramatic move at the end of 1958, 10 West European countries removed the controls applied to the use of their currencies by nonresident earners. While this action did not wipe away all restrictions with one stroke, it was a long stride toward complete convertibility and a world commerce free of exchange control.

AT THE END OF World War II, the economies and productive capacity of most Western European countries were either damaged or geared to wartime uses. In addition, the cost of the war had reduced Western Europe's gold and dollar reserves to very low levels, and traditional trade and payments patterns had been seriously dislocated.

These conditions led to the reestablishment of trade mainly along bilateral lines. A simple example of a bilateral agreement is one concluded a few years ago between Denmark and Finland. Denmark agreed to buy approximately \$23 million worth of paper, timber, and timber products in exchange for an equivalent amount of machinery, chemicals, rubber and textile products, and shipping services.

Such arrangements were used to avoid payments deficits or surpluses, because deficits beyond an agreed "swing" limit usually had to be settled in gold or U.S. dollars. Nor could net surpluses with one country ordinarily be used to settle a payments deficit with a third country, because the surplus currency was not convertible, i.e., could not be exchanged for another currency. Trade expansion—a necessity for economic growth—was therefore stifled by the high degree of bilateral balancing.

Moreover, at the end of World War II latent demand of these Western European countries for dollar goods and food greatly exceeded their dollar earnings and any aid they were receiving. To prevent further depletion of gold and dollar reserves, they maintained inherited restrictions on trade and payments and applied them particularly against U.S. products. These restrictions included all sorts of quantitative controls as well as state trading.

Rebuilding Europe's Economies

The Marshall Plan, started in 1948, helped rebuild the economies of Europe. War-damaged factories were rebuilt and others modernized with the aid of U.S. loans and grants. One outgrowth of the Marshall Plan was the Organization for European Economic Co-operation (OEEC).

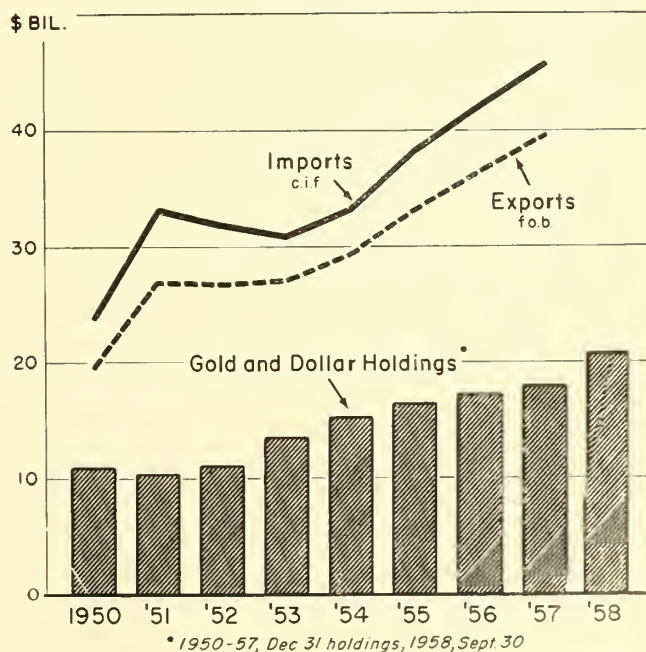
Under the auspices of the OEEC came the establishment of the European Payments Union (EPU) in 1950, which included Western European countries and their associated monetary areas, but not Spain, Yugoslavia, and Finland.

The prime aim of EPU was to establish intra-European trade on a multilateral basis. This was accomplished by allowing member countries to offset their bilateral surpluses against their bilateral deficits with other member countries. For example, the United Kingdom's export surplus with France, Germany, and Italy served to pay its import deficit with the Netherlands and Belgium.

Though EPU removed the need for members to balance bilaterally, each member now had to concern itself with its net surplus or deficit position. Thus, if the United Kingdom's total deficits were larger than its total surpluses, the excess deficit would then be settled through established EPU patterns. At the start, deficit payments were "softened" by permitting member countries to pay 40 percent in gold, settling the remaining 60 percent through credit

(Continued on page 18)

WESTERN EUROPE'S TRADE AND DOLLAR HOLDINGS BOTH RISING





By Elton G. Nelson



Shown here are our three biggest fiber imports: top left, jute in Pakistan; left, sisal plants in Haiti; above, cutting abaca in Philippines.

OUR FIBER IMPORTS

For cordage, burlap, brushes, baskets, and such the United States spends some \$250 million a year.

THE UNITED STATES depends upon other countries for its entire supply of cordage fibers, most of its brush, basket, bag, and textile fibers (except cotton and man-made fibers), and nearly all of the miscellaneous related commodities such as bamboo, rattan, and kapok. Annual imports of these fibers total approximately \$250 million, of which about 20 percent is in the form of raw fiber and 80 percent is manufactured products.

These fibers and their products come from all over the world, and for the countries that grow and manufacture them they are vital sources of foreign exchange. For India and Pakistan, jute is a large foreign exchange earner. For Tanganyika, sisal accounts for 25 per-

cent of foreign earnings. Henequen is important to Mexico, just as abaca is to the Philippine Republic.

Our leading raw fiber imports (value basis) are abaca, sisal, and jute, in the order named. Together they were valued at \$48.5 million in 1957. Of the manufactured products, burlap, rope, agricultural twines, cloth, and yarns lead the list. Jute bags, bagging, and burlap alone amounted to \$82.3 million in 1957; twines and cordage, \$29.4 million; and flax, hemp, and ramie textiles, \$26.8 million.

Most of the fibers that we buy fall into two groups: hard or soft fibers. The hard fibers come from the leaves of the plants and are used for cordage; the soft fibers, from the stem and are

used largely in textiles. A considerably smaller, miscellaneous group includes such things as kapok and certain minor brush, cordage, textile, and paper-making fibers.

Hard Fibers

Hard fibers are used for many things—brushes, brooms, carpets, hats, grain bags—but their principal use in the United States is in cordage. Rope is one of the oldest products made by man and throughout the centuries its application has widened. Today it is as essential to the agriculture and industry of our country as it has been to our navy and marine industries. Yet despite the age-old history of rope, it is only within the last 100

By Cecille M. Protzman
Sugar and Tropical Products Branch
Foreign Agricultural Service

years that the suitability of hard fibers for cordage has been recognized. Before that, true hemp, a soft fiber, was used.

The United States is the world's largest market for hard fibers. We take more than a fourth of the world's sisal as fiber and manufactured goods, a third of the abaca, and nearly two-thirds of the henequen. These fibers are vitally important to us. Abaca and sisal were classified as strategic materials during World War II and have been stockpiled ever since. They also enter this country free of duty.

Sisal.—The world's principal cordage fiber, sisal originated in Mexico, where the plant, with its rosette of stiff, spiny-tipped leaves, was named after the town of Sisal, an old Yucatan seaport. From there it was carried to Florida, then to Africa and to Asia, and finally back to the Western Hemisphere. Tanganyika now produces one-third of the world's total, and nearly two-thirds of the African sisal. Brazil ranks second, followed in order by Kenya, Angola, Indonesia, Haiti, and Mozambique. In all, some 1.1 billion pounds are produced annually, and most of it is exported as raw fiber to the United States, Canada, Japan, and the industrial countries of Europe.

Sisal as well as most other hard fibers is obtained by a process called decortication, whereby the leaf pulp is scraped away from the fiber. After extraction the sisal fiber is washed, dried, brushed, and baled. It is stiff, creamy white, and from 2 to 5½ feet long. The United States buys about 112,000 tons of sisal a year and uses it for rope, twines (especially baler and binding twines), and upholstery padding.

Henequen.—Like sisal, henequen originated in Mexico, but its cultivation has remained there. Nearly nine-tenths of the world supply of over 270 million pounds is produced in Mexico and the rest largely in Cuba. Though native to the Yucatan Peninsula of Mexico, henequen is rarely found there now except under cultivation. Most of it is manufactured into cordage, its cultivation and manufacture furnishing almost the only means of livelihood for the people of the Peninsula.

The United States imports more

than half of the world supply, mostly as binding and baler twines and in 1957 these imports totaled over \$10 million—nearly half of all binding and baler twine imports. In that same year, our henequen fiber imports were 13,000 tons, valued at \$1.8 million.

Abaca.—Abaca is the preferred fiber for rope for marine use, mining, and well-drilling, and for the better grades of large, strong cordage. Also, as much as 10 million pounds are manufactured into teabags, mimeograph mats, and other specialty papers. In the Philippines, which is the principal source of abaca, the finer grades are woven into a cloth typical of that country.

The plant belongs to the banana family and is grown in about the same way. The fiber is often called Manila hemp, which is most misleading for it is not a hemp nor does it grow near Manila. When the fiber was first discovered, true hemp was the main rope fiber, so the term hemp carried over and was differentiated by the name of the port of exit—Manila.

World abaca production amounts to about 280 million pounds a year—a little more than henequen, but only about a fourth as much as sisal. For the Philippines, abaca is an important export crop; nine-tenths of its production goes abroad, and nearly a third of that to the United States.

Istle.—Used here mainly for brushes, istle is another Mexican fiber. It is the *ixtle de lechuguilla* of Mexico but commonly called Tampico fiber since most of it is exported from that port. Its importance in the United States is relatively small; in 1957 we imported about a half million dollars worth of raw fiber, \$2.4 million of dressed fiber and manufactures.

Maguey.—The magueys, also cordage fibers, come from both Mexico and the Philippines, and a maguey known as *cantala* from Indonesia. Before World War II, we imported about \$160,000 worth a year—now only about \$30,000, since the other cordage fibers are readily available and preferable for many uses.

At Indian factory jute yarn is being prepared for weaving into bur-lap, of which we buy large amounts.



Courtesy Columbian Rope Company

Rope, one of mankind's oldest products, is essential to both industry and agriculture. Below, farmer puts balls of sisal twine into hay baler.



Courtesy International Harvester Company



Soft Fibers

Soft fibers are especially suitable for textiles and are known as "textile" fibers. After a softening process called retting, they are separated from the inner bark of plant stems. Most of the fibers are from annual plants. Two—flax and hemp—are the chief fiber crops of temperate climates, jute, of the more tropical regions.

Jute.—Jute is more extensively used throughout the world than any other plant fiber except cotton. It is the chief fiber for bags and other protective covering for agricultural products. Pakistan and India grow most of the world supply. Pakistan accounts for almost all of the raw jute exports, India for exports of jute goods.

The United States is the biggest market for jute and jute goods. Our imports each year are valued at around \$97 million of which raw jute amounts to nearly \$15 million. Although millions of jute bags are used annually, none are manufactured here from the raw fiber. Some are imported ready-made, others cut and sewn from imported burlap. From the raw fiber we manufacture carpet yarns, twines, upholstery webbing, cloth backing for carpets and linoleum, and other related products.

Flax.—In Colonial America, every farmstead grew its own flax, and every household wove its own linens. Today little or no flax is grown for fiber in the United States, Europe—principally Russia—being the main producing area; and many of the household fabrics that we call "linens" are now made of cotton. Flax is used in the United States mainly for such manufactures as napery, dress fabrics, and handkerchiefs and for strong threads and twines. To supply these products our imports of fiber run around \$1.4 million a year and of manufactures, more than \$15 million.

Hemp.—"Hemp" ropes are now seldom made of true hemp. This has been replaced by the hard fibers, which are stronger. Also, many of the other uses have been taken over by jute and cotton, which normally cost less. Hemp, however, can be substituted for flax in threads and twines, and it is mostly for these that the United States imports over \$100,000 worth a year—

mainly from Italy and Yugoslavia.

Sunn.—Sometimes called "sunn hemp," this fiber is imported from India, chiefly for manufacture into cigarette papers and other high-quality paper tissues. It is also used in caulking materials, twines, and cordage, and sometimes as a substitute for true hemp. Our imports are valued at about \$300,000 annually.

Ramie.—Historically ramie is an ancient fiber, which has been produced and used in China and other parts of the Orient for thousands of years. A number of other countries, including the United States, produce it also, but on a much smaller scale and mostly on an experimental basis. Experimental work is continuing on both cultivation of the crop and processing of the fiber. Ramie makes attractive textiles that can be fashioned into clothes, napery, upholstery fabrics, draperies, trimmings, and the like. Also, it can be used industrially.

Palm-Type Fibers

From palms and palm-type plants in tropical and semitropical areas come the hard fibers for scrubbing brushes and heavy-duty brooms. These fibers can also be used for hats, baskets, mats, and upholstery filling; and to some extent they compete with waste from other fiber products and from man-made fibers.

U.S. imports of this group of fibers amount to over a million dollars a year. *Palmyra*, *piassava*, and *palm fibers* make up more than half. The other half includes: *coir*, a coconut fiber imported from Ceylon and in yarn form from India, which is used mainly for rope, mats, and brushes; *crin vegetal*, which grows wild in northern Africa and southern Europe and is used in the United States for stuffing pads and cushions to give them stiffness and shape; and *raffa*, used to tie bunched vegetables, as horticultural twine, and in various handicrafts.

Miscellaneous Fibers

Kapok is the most important of the other vegetable fibers. A fluffy seed-pod fiber that needs no treatment other than separation from the pods and seeds, it is obtained from forest or plantation trees and plants in

(Continued on page 19)

Australia-Japan Farm Trade Grows

The flow of farm products from Australia to Japan has increased sharply since 1950. Commercial ties between the two were strengthened by a trade agreement signed in mid-1957, though trade in its first year was not as good as had been hoped. Japan ranks second only to the United Kingdom as a market for Australia's farm products; Australia, second only to the United States as supplier to Japan.

Wool, barley, wheat, sugar, meat, tallow, and hides and skins account for 99 percent of Japan's farm imports from Australia; wool alone, for four-fifths. Barley, wheat, tallow, and hides and skins are important also in U.S. trade with Japan.

Australia has been a leading supplier of barley to Japan and has substantially increased its share of Japan's wheat imports. The 1957 agreement guaranteed it a Japanese market for at least 200,000 tons of soft wheat that year and increasing amounts the next 2 years. Australia's drought cut Japanese purchases to 111,000 tons in 1957, but for January-September 1958 they were well ahead of those for the same period a year earlier. Japan's barley import from Australia however, were running lower and were not expected to equal 1957's 380,000 tons.

In January-September 1958, Japan's imports of hides and skins and of tallow from Australia each amounted to 6,000 tons. But for hides and skins the figure was twice as large as in all 1957; for tallow, only half as large.

In 1957 Australia supplied 84 percent of Japan's wool imports. Japan's recession affected its wool textile industry. Its wool purchases from Australia in January-September 1958 were only 72,000 tons against 104,000 in all of 1957, but are likely to recover with improvement in Japanese and foreign demand for yarn.

Sugar is a promising new item in Japanese-Australian trade, though January-September imports, at 72,000 tons, were running below 1957. Future prospects will depend largely on prices and exchange availabilities.



Photo from ARXIV "MAS"

Many Spanish farms still resemble this old Catalanian one. Oxen are still the mainstay, though a start has been made in the costly process of mechanization.

The Spanish Market

By Elfriede A. Krause
European Analysis Branch
Foreign Agricultural Service

Spain, like much of Mediterranean Europe, is poor in natural resources and has severe problems of topography and climate. Moreover, economic recovery from the civil war of 1936-39 was not complete until the early 1950's. Spain today is trying hard to increase its rate of economic expansion. But partly as a result of this effort, and despite U.S. economic assistance, its foreign payments position has become precarious. At present Spain does not have the dollars to buy the U.S. farm products it wants and needs. Its high rank on the long list of U.S. farm markets—frequently among the top 10—is due largely to the various U.S. programs that enable sales for pesetas or direct grants.

Heavy inflation has accompanied the industrial expansion taking place in Spain, especially in the past 3 years. Imports of capital goods and raw materials have increased substantially, and so have imports of consumer goods in response to rising demand.

To husband its scarce foreign exchange, Spain has quantitative restrictions on all its imports. It has received

a total of about \$1 billion in U.S. economic assistance from 1951 through 1958, in the form of dollar grants and credits, technical aid, and sales of U.S. commodities for pesetas. Nevertheless, Spain's balance of payments deficits have persisted, even increased; and its gold and foreign exchange holdings have declined to dangerously low levels.

The Spanish peseta, devalued in April 1957 at a unified rate of 42 pesetas to the dollar, has further depreciated in free markets to more than 60 pesetas as of late January. Moreover, there has been a gradual return to a system amounting to multiple exchange rates, under which the effective foreign exchange rate for some products is close to the free rate.

It remains to be seen whether Spain will effectively come to grips with these problems. Efforts in this direction should be assisted by the fact that Spain has recently become associated with several international organizations which impose a measure of economic discipline upon their members—the Organization for European Economic Co-operation (OEEC), the



Courtesy Spanish Embassy

Above, modern granary near Granada; below, ancient one on northern coast.



Photo from ARXIV "MAS"

International Monetary Fund, and the World Bank.

Spain Still Largely Agricultural

The second largest Western European country after France, Spain is one of the most poorly endowed for agricultural production. Precipitation is ample only in the north, mainly a region of high mountains. Much of central and southern Spain has meager rainfall, badly distributed through the year and highly uncertain. A large share of the land there is so rough and barren that it can be used only for grazing sheep and goats. In some areas,



By James O. Howard

On the central tableland, rains are infrequent. But new dams in the mountains are helping bring more water and power to both agriculture and industry.



Courtesy Spanish Embassy

however, irrigation systems have been developed—often over centuries—which permit a very intensive type of agriculture, one of Europe's most productive.

About half of Spain's population is still dependent on agriculture for a livelihood. But many farmers and farm laborers, even with long hours of hard, backbreaking work, can eke out only a bare existence.

Recent Economic Expansion

Spain's agricultural production averaged less than 10 percent higher during 1953-57 than 1931-35, but total population had risen by nearly 20 percent. Efforts to increase Spanish agricultural production have been accelerated in recent years, in an attempt to catch up with population growth and increase in per capita demand.

Industrial production, however, expanded even during the 1940's and continued its growth at an accelerated

rate in the 1950's. From 1950 to 1957, industrial output rose by 82 percent; manufacturing production 71 percent, electricity and gas 104 percent, and mining 50 percent. Despite its marked expansion productivity is still well below that in most of West Europe.

Foreign Trade

Over half of Spain's exports and over one-fourth of its imports consist of agricultural products. Nonagricultural exports are chiefly iron ores and pyrites, other minerals, and cork.

Spain's principal export is citrus fruit, chiefly oranges. This normally accounts for nearly a fifth of total exports. In 1956 and 1957 orange exports were abnormally low because of heavy freezes in February 1956; exports were about back to normal by 1958, however. Other important farm exports include olive oil, wine, olives, tomatoes and bananas (mostly from the Canaries), rice, almonds and filberts, potatoes, grapes, and canned fruits and vegetables.

Spain's principal farm markets are mostly Western European countries, in particular the United Kingdom, West Germany (Spain's largest market for oranges), and France. The United States normally ranks third or fourth as a market for Spanish farm products. During 1954-57 it took about 85 percent of the olives Spain exported, 30 percent of the olive oil, and nearly 60 percent of the paprika. Other sizable exports to the United States are wine—especially sherry—and almonds.

Spain's principal agricultural imports are vegetable oil, cotton, rubber, tobacco, coffee, wheat (in poor crop

years only), feed grains, meat, and eggs. Imports of vegetable oil, feed grains, and livestock products have become important only very recently, largely as a result of the increased consumer demand which industrialization has brought and which Spanish agriculture is not able to satisfy. In 1953 less than 25 percent of Spain's total farm imports came from the United States; this proportion increased to 43 percent in 1954, 39 percent in 1955, and nearly 55 percent in 1956, and stood at about 48 percent in 1957.

Most agricultural imports from the United States in recent years have been made under Public Law 480 or Section 402 of the Mutual Security Act, or have been financed by Export-Import Bank loans. Spain has bilateral agreements with many countries and attempts to get most other essential imports under these agreements. There have been a few exceptions when imports of certain products, for example vegetable oil, were considered so important as a means of holding down prices in the battle against inflation that they were made even at the cost of depleting scarce dollar reserves still further.

Main Farm Imports from U.S.

The principal U. S. agricultural products imported by Spain in 1956 and 1957 were soybean oil and cotton. These accounted for over 75 percent of total Spanish farm imports from the United States in 1956 and about 67 percent in 1957. Other important items, in order of value, were meat, feed grains, tobacco, wheat, and tallow.

Soybean oil has only recently be-



Courtesy Spanish Embassy

come an outstanding agricultural import for Spain. This is the result of a decline in olive oil production coupled with a substantial increase in demand. If Spain's efforts to increase production of olive oil and promote cultivation of oilseeds are successful, it may in the future be able to provide more of its own vegetable oil requirements than at present. But it will probably still rely on foreign sources for a sizable part of its supply, not only to meet its rising consumption requirements, but also to be able to continue exporting olive oil.

When U.S. soybean oil was first shipped to Spain some consumer opposition was met, largely because of improper refining of the oil before blending it with olive oil for edible use. Through technical assistance to the Spanish industry, financed by market development funds under P.L. 480, this problem has been largely overcome.

Cotton consumption has increased in Spain during recent years but this increase has been entirely covered by domestic production. Whereas domestic cotton provided an almost negligible proportion of Spanish total requirements as late as 1946-49, one-third to almost one-half of the total consumed in recent years has been domestic cotton. Thus there has been a slight decrease in U.S. shipments to Spain, though the U.S. share in Spain's total cotton imports has increased appreciably.

Future expansion of cotton production in Spain will depend largely on the government's price policy. At competitive prices, production would probably drop sharply. It is hardly likely, in any event, to go as high as consumption, which will probably also continue to rise with population growth and improved standards of living. Spain is likely to remain a fairly important market for U.S. cotton, certainly as long as sales for pesetas are possible—and also in the long run, if U.S. prices are competitive.

Meat imports into Spain were very small before 1956. In that year some 40 million pounds of frozen meat were imported, and in 1957 over 70 million. Over half the meat imported in these 2 years was U.S. beef, prob-

U.S. Coarse Grain Exports Promise To Exceed Record High of Last Year

U.S. coarse grain exports, which have multiplied tenfold in the last 20 years and now rank high in U.S. foreign farm trade, are continuing to expand. Last year U.S. coarse grain exports reached a peak of 8.4 million tons, and for the first half of the current marketing year (July-December), they are running 40 percent ahead of those a year ago. This marks a reversal of the questionable prospects of early fall.

Western Europe is the most important market for U.S. coarse grains, and the level of exports to this area largely determines total exports in any one year. In recent years, for example, sales to Western Europe have averaged about 70 percent of total shipments. Greater livestock numbers, especially of swine, and newer feeding practices are mainly responsible for this demand.

This year, however, the coarse grain export picture appeared less optimistic. On July 1, Western Europe had an excellent crop of wheat awaiting harvest, but by the end of July much of the crop was still unharvested because of rainy weather. It seemed certain that a large proportion of the crop would be of only feeding quality, and that this feed wheat would take the place of the usual imports of corn, barley, oats, and grain sorghums. In other years, when Western Europe has suffered weather damage, the U.S. coarse grain trade has fallen off.

Yet as the marketing season has progressed, it becomes apparent that

the damage to Western Europe's wheat crop was not so serious as anticipated and the diversion to animal feed was not excessive. U. S. exports to the area have been running at high levels all season. India, Japan, and Korea have also been responsible for large increases in U.S. overseas shipments.

Total U.S. exports of coarse grains for the first half of the July-June 1958-59 year were 5.5 million metric tons, 1.6 million tons over the same period of a year before. Of this increase, 1.1 million tons went to Western Europe. (These are preliminary figures and no products are included.)

Among the various grains, barley exports showed the greatest gain, 770,000 tons, for a total of 1,482,000 tons in the 6-month period. While the increased shipments to Germany and the Netherlands were the largest, substantial gains were also recorded for Japan, Poland, Korea, Spain, and Denmark. United Kingdom receipts were down 136,000 tons.

Grain sorghums exports, at 1,227,000 tons, were up 807,000 tons. The Netherlands and the United Kingdom showed the principal increases, followed by Denmark, Belgium, West Germany, India, Korea, and Israel.

Corn, still the most important export of coarse grains, with 2,569,000 tons shipped in the July-December period, showed a net gain of only 9,000 tons. Plus quantities were shown to the Netherlands, the United Kingdom, Spain, Ireland, Canada, Japan, and India. Shipments to Mexico were off by 350,000 tons. Austria, Belgium, and Korea also showed declines.

Exports of oats totaling 185,000 tons were down 5,000 tons from a year ago.

U.S. coarse grain exports for the balance of the year, January-June, are expected to continue at high levels. While Argentina has exported large quantities of corn in the last 6 months, available supplies will be limited until the 1959 crop is harvested in April-May. Also, Syria, France, and Iraq currently have very limited supplies.

ably all shipped under the Mutual Security Act and P.L. 480. Outside of these imports under special programs, Spain has obtained most of its meat imports from countries with which it has bilateral trade agreements.

Spanish demand for meat will continue to rise, and despite efforts to increase domestic livestock production, Spain may well be importing larger

(Continued on page 16)



Modern machine digs ditch for tile drains on peat soil near Minsk. Right, a retired farmer beside 4-year-old shelterbelt.



How the Soviets Use Their Soil and Water Resources

By **CHARLES E. KELLOGG**
Soil Conservation Service
United States Department of Agriculture

THE UNITED STATES' mission on soil and water use reached Moscow July 18, 1958, and left August 20, after traveling nearly 10,000 miles. Our itinerary was planned with the Soviet Ministry of Agriculture, which also arranged for a high-ranking expert and an excellent interpreter to accompany us.

In Moscow, we visited the principal academies and institutes dealing with soil problems, including the highest authority on soil sciences in the Soviet Union—the Dokuchaiev Institute of Soil Science of the Academy of Sciences of the USSR. Outside of Moscow, we visited research institutes, experimental areas, and state and collective farms near Minsk in Belorussia; Kiev, Poltava, and Dnepropetrovsk in the Ukraine; Rostov, Krasnodor, and Stalingrad in the Russian Republic; Tashkent and Andizhan in Uzbekistan; and Akmolinsk in northern Kazakhstan.

Direct and meaningful comparisons of soil management practices on farms in the Soviet Union with those used in other countries are difficult. We saw very few examples of soil or water management practices carried out better on Soviet farms than on good American commercial farms, and we saw many that were poorer. Of course, scientific farming on a wide scale began much earlier in the United States than in the Soviet Union. Besides, Soviet agriculture suffered greatly during the Revolution and both world wars, particularly in World War II when the best farming areas were almost devastated. Recovery, however, has been remarkable.

Basic Soil Science

Between about 1870 and 1914 the Russians developed an excellent school of soil science under the leadership of a number of truly great scientists.

All that time, the emphasis was largely on basic soil science, including soil classification and regional soil exploration, and less on applied research dealing with soil management practices as in the United States. But following the death of Professor K.D. Glinka in 1927 and of Professor Gedroiz a little later, no comparable great leaders in basic soil science appeared. Today the work is still good and adequately taught; the systems left by these men have become firmly fixed, one might almost say as classical as ancient Greek.

Yet the soil classification scheme is widely and effectively used and well understood in the Soviet Union. A much higher percentage of agricultural technicians, agricultural officers, and farm managers understand soil classification and use it than do comparable agriculturists in the United States.

Soil Management Research

For some time the Soviet Union has also had a few very competent workers in the field of soil management, but the development and application of soil management practices have been

handicapped by a lack of fertilizers, machines, and the many other industrial materials needed. All these are now becoming available to farms in something that begins to approach adequate amounts, and the trend is strongly upward.

So far the Soviet soil scientists have not widely adopted modern methods for field experimentation. We did not see a single set of field plots laid out with the randomization and replication required for modern statistical treatment of the results. It is known that such experiments do exist at some places in the country, but their general lack is a great handicap to those charged with giving Soviet farms precise recommendations on combination of such practices as crop rotations, fertilizer use, drainage, irrigation, runoff control, tillage, and the like.

We did see, however, many examples of good machines and of good individual practices. But most farm managers lack accurate guidelines for determining their precise effects, especially in combinations with other practices where interactions among them and with varying weather conditions are important.

Soil Maps and Farm Plans

The farms we visited had soil maps, often supplemented with other maps showing the readily available phosphorus, soil acidity, and the like. Farm plans are developed on the basis of these maps from agricultural information related to the various kinds of soil, and according to the estimated needs for production in the government plan. Because of difficulties of transport and special governmental emphasis on certain crops, many farm plans include crops that are not well adapted to the local conditions. For example, fruits are produced in areas unsuited to fruit on account of transportation problems; corn is included in farm plans where the moisture is inadequate or the season too short, simply because of government demand. Yet we saw little soil not suited for cropping being used for crops: also, we noted that the cultivation of soils

with high hazards of erosion or blowing was avoided.

Apparently, once the plan of a farm is agreed upon between the administrators, the farm manager, and the staff, the manager is obliged to carry it out unless it is modified through later consultations based on new information or changes in crop goals. Not all farms have soil maps but the various oblasts visited had plans for their completion in about 2 to 5 years. Despite uncertainty over some practices, yields were generally good, even taking into account the fact that 1958 was a good year. Available research information seems to get into use quickly through the farm-planning scheme.

Irrigation and Drainage

The Soviets report somewhat over 24 million acres under irrigation and plan to have some 4.5 million more under irrigation by 1965. Much of the irrigation is for cotton in southern areas, with warm, but short summers. Irrigation of soil for rice is to be expanded as well as that for fruits, vegetables, and other crops.

On the whole, irrigated crops look good but water use on farms could be considerably improved through more precise research, especially research on the interactions among water use, fertilizer use, and plant population. Also, a large part of the soil already irrigated may need some

(Continued on page 16)



Demonstrating a machine with hydraulic controls for making mole drains in organic soil, on farm near Minsk.



Good corn in rotation with clover is grown on Grey-Forest soil, Poltava.



U.S. scientists look over rice experiments, Krasnodar. Modern field methods are not widely used in USSR.



Secretary of Agriculture Ezra T. Benson, left, accepts the loan of "The Champ" from President Raymond E. Rowland of the Ralston Purina Company at a ceremony in Washington.

Here the United States will operate a full-scale milk-recombining plant demonstrating the use of U.S. nonfat dry milk solids and anhydrous milk fat as a dependable source of dairy products for deficit areas. Samples of recombined milk and ice cream are to be distributed.

The 27th International Samples Fair, Barcelona, Spain, June 1-20. USDA will cooperate with the U.S. Department of Commerce in setting up a complete supermarket displaying a wide variety of U.S. foods, particularly canned, frozen, and packaged products.

The International Food Exposition, Lausanne, Switzerland, June 13-28. At this fair, which will be held in conjunction with the International Congress of Food Distributors, U.S. exhibits will feature mainly frozen poultry and fruits in addition to such convenience foods as prepared mixes, concentrates, and ready-to-serve dishes.

The 5th General Provisions and Fine Foods Exposition, Cologne, Germany, September 26 to October 4. Actually this is one of Europe's oldest fairs, although the numbering dates from 1948. The U.S. exhibits at this fair will be quite extensive, including such important products as fruits, soybeans, tobacco, frozen foods and mixes, poultry, wheat, and honey.

Besides these international fairs, the USDA will cooperate with the U.S. Department of Commerce in what are called "solo" fairs, meaning special exhibits by one country. There will be two, one in Calcutta in April and another in Bombay in October. In both, grain, dairy, and soybean products will be displayed in ways showing their potential usefulness in the Indian diet and economy.

Several fairs may be added to the schedule later on. Under consideration are fairs in Dijon (France), Salonika, Zagreb, Poznan, and Lima.

U.S. Livestock Feeding Exhibits To Tour Farm Fairs in Europe

Mobile units designed to show Europe's farmers advanced techniques of livestock feeding will be the highlight of the U.S. Department of Agriculture's program for this year's international food and agriculture fairs.

Mounted on trucks these exhibits will travel from fair to fair—mainly in Italy but possibly in other parts of Europe—to show farmers the relationship between balanced rations and high productivity. The purpose is to stimulate expanded livestock industries in Europe as a means of promoting larger markets for U.S. feed grains and feed concentrates.

Participation in international trade fairs offers the United States an effective means of acquainting potential customers abroad with U.S. agricultural commodities. The fairs are open to the general public, and in the last few years have afforded millions of people in different countries their first opportunity to actually see and taste U.S. farm products. But their chief purpose is to bring together buyers and sellers, for in foreign countries

fairs are one of the places where people transact business.

This year the USDA will participate in fairs as far east as India and as far south as Peru, but will concentrate mainly on Europe. Exhibits are arranged in cooperation with U.S. trade groups, with the Department's share financed by the funds accruing from the sale abroad of U.S. surplus farm commodities under Public Law 480.

The fairs in which U.S. agriculture will be represented in 1959 include:

The Verona International Fair of Agriculture and Animal Husbandry, Italy, March 8-16. The mobile livestock feeding exhibit will be used for the first time at this fair. It will be shown subsequently at agriculture fairs in Cremona, Foggia, and other Italian towns, and later may move into Spain and Germany.

The 11th Samples Fair of Sardinia, in Cagliari, March 15-30. The USDA will put on an exhibit of poultry feeding using high-protein concentrates.

The Madrid International Agricultural Fair, Spain, May 23-June 23.

West Africa's Changing Geography



THE TIDE OF CHANGE is running strong in West Africa. Today's developments have future implications for countries like the United States that trade in agricultural and industrial products with this large area.

When France's new constitution went into effect in January and the French Community of Nations was inaugurated, all but one of the French African territories had proclaimed themselves autonomous members of the Community, while Guinea, the only territory to reject the constitution and declare its independence, had decided to join with Ghana in a united republic. Two weeks later, four of these French territories—Senegal, French Sudan, Dahomey, and Upper Volta—had decided to join in a new Federation, with a constituent assembly.

Meaningful as these moves are, they by no means close the book on this vast area that stretches from the Sahara to the Gulf of Guinea and from the Atlantic to the Sudan and the Belgian Congo. Returning home from Ghana after the two countries had announced their decision to federate,

Guinea's Premier Sékou Touré told crowds in the capital of Conakry that the union was merely the beginning of the "dream of African democrats—that of a United States of Africa." The joint statement of the two premiers—Touré and Kwame Nkrumah of Ghana—even cited the 13 American colonies as their inspiration for their step.

How deeply the seeds of federation will root should be apparent in the next few years. Already some countries have looked upon the idea with interest. Others do not seem to favor it. Even for Ghana and Guinea, federation is not without its complications. Ghana is a member of the British Commonwealth, Guinea lies within the French orbit, so on this point alone there are problems, not to mention the fact that the two countries are 350 miles apart, separated by the French-oriented Ivory Coast. In fact, if one follows the coastline, Liberia and Sierra Leone also lie between the two countries.

Yet federation is in the air and along with it, a rising pan-Africanism. At the All-African Peoples' Conference held in Accra in Ghana in December, according to reports the general feeling was that the future map of Africa would be a series of politically loosely

knit, economically integrated confederations, in which each particular nation retains its own sovereignty and its United Nations vote, each Premier his title.

What makes this political ferment in West Africa so important is the great size of the area involved and the wealth of its natural resources—a wealth that has barely been tapped in most of the countries. In size, West Africa compares with the United States including the new State of Alaska. Its two largest countries, Chad and Niger, are almost twice the size of Texas; French Sudan, Mauritania, and Nigeria are also considerably larger than Texas.

Formerly, France's holdings were the most extensive—13 times the size of France itself. The territories fell into two groups: French West Africa, the bigger and more prosperous, which included Niger, French Sudan, Senegal, Mauritania, Guinea, Ivory Coast, Upper Volta, and Dahomey; and French Equatorial Africa, made up of Chad, Ubangi-Shari, Middle Congo, and Gabon. Today these territories, with the exception of Guinea, are all members of the French Community, which means that they will have a measure of self-rule, but will remain closely tied to Paris for such things

Note: Ordinarily the French Cameroons and French Equatorial Africa are not considered a part of West Africa but because political changes are taking place there too they have been included in this article.

as foreign policy, defense, economic affairs, and the development of strategic raw materials.

Nigeria, Sierra Leone, and Gambia are the British territories in the area. The British also administer the British Cameroons, a U.N. Trusteeship, as part of Nigeria. Of these, Nigeria is the largest and most highly developed. It is also the largest British colonial territory. Ghana, which was known as the Gold Coast until 2 years ago when it became a self-governing member of the British Commonwealth and took the name of a legendary African State, has the highest per capita income of any of the West African states and is rich in minerals. The area also includes two other U. N. trusteeships, French Togoland and the French Cameroons, plus Portuguese Guinea and Spanish Guinea.

Though the various countries differ greatly as to terrain and climate (those in or bordering on the Sahara are semiarid, those on the Gulf of Guinea hot and humid, with great rain forests), they are alike in many ways. They are, for the most part, sparsely populated, with a very small proportion of Europeans to Africans. Illiteracy is widespread. Transportation is limited and often nonexistent. Industries are few, and agriculture is the mainstay of their economies.

Forest-Agricultural Products

Originally these countries earned their living from ivory and from forest products—timber, wax, gum, rubber, palm oil. And except for ivory, for which the demand is low, these products are still important. With vast tropical forests stretching for thousands of miles, timber resources are abundant. French Equatorial Africa is a leading supplier of ebony and other tropical woods; and from Ghana, the United States buys most of its African mahogany. Although Southeast Asia is now the world's largest rubber-growing area, both Nigeria and Liberia gain substantial amounts of foreign exchange from rubber exports.

In palm oils and palm kernels—used for soap, candles, steel finishing, and lately margarine—West Africa leads the world. The trees grow wild in the rainy tropics, the fruit is gathered by the native Africans and shipped as

palm oil, palm kernel, or cake. Most of these products go to England, France, and other European countries; the United States buys most of its palm oil supplies from the nearby Belgian Congo.

Today West Africa is in its agricultural phase, and some of its agricultural crops and livestock products now rival its forest products. Peanuts dominate the area. West Africa ranks as the world's largest exporter of peanuts and peanut oil, with Nigeria and Senegal the two leading countries.

Cacao is another crop that thrives pretty much throughout the area except in the desert-like regions. Almost two-thirds of the world's cacao is grown in West Africa, and in the last 50 years it has come to be a leading earner of foreign exchange for the countries bordering on the Gulf of Guinea—principally Ghana, Nigeria, Ivory Coast, and the French Cameroons.

Even more startling has been the sudden rise of coffee. Today French West Africa ranks as the world's third largest coffee exporting area. Although Africa is the original home of all coffee, the coffee boom did not start until after World War II. It has been attributed to the demand for Robusta coffee—the low-altitude African variety—which is used in many of the instant soluble blends. As a result, production in some areas has more than doubled in the last 10 years.

Bananas constitute another key crop. West Africa accounts for over 8 percent of world banana exports. Pineapples and other tropical fruits are important, too, but they have not reached the magnitude of bananas, and are consumed locally.

Cotton is a minor export but one that is increasing. Though cotton is grown in many parts of West Africa, Chad, French Sudan, and Nigeria are the main exporters. Other agricultural exports, which are largely traded within the area, are live cattle, hides and skins, rice, kola nuts, corn, and grain sorghums.

Mineral Resources

While the emphasis is on agricultural exports at the present time, it may well be that these countries, in the next 10 years or so, will find their mineral resources far bigger money-

FAS Publications Now Available

In the past few months, the Foreign Agricultural Service has published reports covering a variety of subjects.

The Position of Oriental Tobacco in World Production and Trade, issued in November as Foreign Agriculture Report No. 113, is a comprehensive 66-page study of this product, with particular stress on its importance to the foreign trade of the countries producing it and on the keen competition it offers to U.S. flue-cured leaf.

Four smaller studies give general background on countries or commodities that are of interest—present or potential—to U.S. agriculture. *The Food and Agriculture Situation in Finland* (FAS-M 42) and *United States Variety Meats in World Markets* (FAS-M 43) were published in October; *Deciduous Fruit Industry in Chile* (FAS-M 44) and *The Agricultural Economy of the Sudan* (FAS-M 45), in November.

To replace the single competition and market development reports, FAS this year published a group of seven separate commodity reports, covering foreign trade prospects in fruits and vegetables, livestock and meat, dairy and poultry products, grain, cotton, fats and oils, and tobacco.

makers. The wealth of the Belgian Congo, lying just east of the area, is well known; it supplies 72 percent of the world's industrial diamonds and its copper, gold, silver, and uranium deposits are being profitably exploited.

West Africa is just as rich in minerals but few of these resources have been adequately developed. True, gold has been an essential export for many years, and Nigeria's tin and columbite industries are old and valuable. Several countries—Liberia and Guinea, for example—export iron ore. Ghana is not only an important exporter of gold, industrial diamonds, and bauxite, but has what is reported to be the world's largest manganese mine. In 1953, high-grade manganese was also discovered in French Equatorial Africa; and Mauritania, now to be known as the Islamic Republic of Mauritania, has large deposits of copper and iron.

The palm tree that produces Brazil's carnauba wax is the *copernicia cerifera*, which often lives to be 200 years old. Far right, workers trim and separate fronds which are cut twice a year.



Photos by Chas. M. Elkinton

Carnauba, the World's Hardest Wax— it's produced only in Brazil under drought conditions

Growing wild all over Brazil but particularly in the drought-ridden northeast states is a tall, slow-maturing palm tree which yields the world's most valuable vegetable wax. Known as carnauba wax, it is produced exclusively in Brazil. The trees will grow in other parts of the world, but they will not form their valuable wax under conditions other than Brazil's flood-drought climate.

The wax itself is actually a protective secretion with which the tree coats its leaves to protect them from drying out through drought seasons. The dryer the season, the better the quality and the larger the quantity. But even in very dry seasons a wax palm averages only about 6 ounces of wax a year, and less in wetter years.

So hard is carnauba wax that it forms the base for the finest waxes, polishes, and lacquers. Its many uses include ceremonial candles, lipstick, carbon paper, phonograph

master records, soap, and other products where a fine wax is necessary. A coating of carnauba wax will even enable airplanes to increase their speed.

Carnauba wax is one of Brazil's major export products. In 1956 it ranked fourth in value, accounting for over \$17 million in income—nearly \$12 million from the United States. In 1957 it brought Brazil \$19 million, even though it had dropped to seventh place.

Production, unfortunately, is declining. This has been attributed to disease, but the chief reason is over-exploitation. Another factor has been the migration from the palm areas of many impoverished families. So while there may be some years when output will be high, the general trend appears to be downward unless a replanting program is set up similar to the one carried out in the 1940's by the Ministry of Agriculture.

Carnauba fronds on the drying rack. After drying the fronds are chopped, heated, and pressed to obtain wax.



Frond-chopping is usually hand work, but this producer has found that a machine raises his wax output some 3,000 lbs.



WORLD Agricultural Summaries

Jute. Crop expansion in India, Brazil, and Taiwan boosted the estimated output of jute to over 4.4 billion pounds in 1958 from about 4.2 billion in 1957. Pakistan grew 55 percent of the world's raw jute in 1958, and India, 41 percent. Brazilian production expanded rapidly until 1956, but seems to have leveled off.

Rice. World rice acreage is at a record level and 1958-59 (August-July) production is expected to far exceed any previous harvest. Mainland China, which grows more than a third of the world's rice crop, has had unusually favorable weather so far this season.

Peanuts. Rapid expansion in Communist China and India and larger crops in the United States and Brazil have pushed the 1958 world peanut crop to a record high. Total output was estimated at 15.5 million short tons (unshelled)—almost 6 percent above the previous record in 1957.

Almonds. The 1958 commercial almond crop was plagued by bad weather. Frost in Italy and rain in California and Portugal were responsible for poor fruit set in those areas. Iran and Morocco, on the other hand, had unusually favorable weather. Total production was estimated at only 54 percent of 1957 output of 117,100 tons (shelled basis).

Dry Edible Beans. Overall dry edible bean production was up in 1958, but in important areas of Eastern and Western Europe—major traders of white beans—the crop was short. Production in the United States and 27 foreign countries was estimated at 92 million bags (100 pounds), about 5 percent above 1957. Another 35-40 million bags were probably grown in the Sino-Soviet Bloc and the Far East other than Japan.

Spanish Market

(Continued from page 9)

amounts of meat to satisfy this demand and keep down meat prices.

Grains, taken all together, are important U.S. exports to Spain. Wheat, however, has been of minor significance since 1954; in some recent years, Spain has even exported more wheat than it has imported. The situation could change quickly, however, should Spain have one or two crop failures; and Spanish weather is highly uncertain.

On the other hand, U.S. feed-grain exports to Spain, though insignificant in the past, have recently gained in importance. Spain's import requirements of feed grains are likely to increase with expanding livestock production.

Outlook

The purchasing power of the average Spaniard is still very low; he may be expected to spend a larger share of any increase on farm products—especially food—than the average citizen of more highly industrialized countries.

Spain's agricultural output may for some time lag behind growing per capita and total demand. But imports for dollars will increase only if Spain can solve its payments problem by increasing its foreign exchange earnings.

U.S. TRADE WITH SPAIN (EXCLUDING THE CANARIES)

	1956-57 mil. dol.	1957-58 mil. dol.
Exports:		
Cotton, unmanufactured.....	29.1	31.7
Soybean oil	68.8	48.1
Wheat0	1.0
Other grains	6.3	1.3
Meat	22.3	.2
Eggs	2.2	(1)
Tobacco	3.5	4.5
Food for relief ²	14.8	21.9
Other	1.0	.9
Total agricultural	153.2	109.9
Nonagricultural	97.0	86.0
Grand total	250.2	195.9
Imports:		
Olives	16.8	17.6
Olive oil	4.6	3.2
Wine	2.6	2.5
Almonds	(1)	1.8
Paprika	2.3	1.7
Other	2.7	3.6
Total agricultural	29.0	30.4
Nonagricultural	29.1	22.8
Grand total	58.1	53.2

¹ Less than \$50,000.

² Principally under Title III P.L. 480.

Soviet Soil and Water

(Continued from page 11)

additional drainage in order to remain productive.

In Belorussia, large schemes are under way for utilizing some 3 million to 3.5 million acres of organic soil for crops. Where this soil was observed, it was comparable in quality to the better muck soils of Michigan, Ohio, and New York. New machines for reclamation and improved methods for tillage are also being studied. Apparently, tile drainage is not yet well developed in the Soviet Union but extensive plans for improvement are being made.

Hazards of Climate

The climate in the Soviet Union is a well-known hazard. Winters are severe, and over large areas the growing season is relatively short. We may think of the main agricultural part of the country as a kind of fertile triangle, based on the western boundary and extending to an apex in far Central Asia. A large part of this triangle, with soils developed under steppe and forest-steppe, is subject to summer droughts by an extension from the south and east of the desert climate of Central Asia and from the southeast of the Mediterranean summer climate. But last year the temperature was lower than normal and the rainfall higher in the great grain-growing regions from an extension of the Baltic climate to the south.

Soil Erosion and Blowing

Soil erosion, generally, is not so serious as in the United States. Rains of high intensity are less frequent, a larger proportion of the Soviet soils is nearly level to gently sloping; and a larger proportion of the Soviet soils has high infiltration rates. Yet where the rivers have cut deeply into the loessial plains, great ravines extend back from the rivers. Near some of the ravines serious gullying is active. Up to now, the Soviets have relied mainly on protective vegetation for control. In many places, however, diversion terraces with masonry outlets or chutes will be required. So in some parts of the country there is serious erosion of great local importance with-

out adequate control measures. Generally, the use of civil engineering works—small dams, diversions, terraces, and the like—is not so well developed on Soviet farms as on American farms.

Soil blowing is a potential hazard in many places as a direct result of drought. Unusual care is taken, however, to avoid plowing of sandy soils and other soils subject to this hazard. On the farms we visited, we found little evidence of serious soil blowing, although some could certainly be expected in very dry years.

For 70 years or so shelterbelts have been used in Russia. Many were destroyed during World War II and new plantings are being made. The early belts were wide, but now smaller 2-, 4-, and 6-row belts are used. Unlike U.S. farmers, the Soviets use belts for protection against summer rather than winter winds; thus, nearly all of their belts have deciduous trees rather than evergreens.

General Status of Farms

Many farms have made great strides toward mechanization and electrification during the past 10 years. Incomes, however, vary widely, especially among the collective farms. From what we saw, we estimated that a standard work-day unit might range in value from roughly 7 rubles (about 70 cents) to 30 rubles (about \$3), considering payments in both cash and kind. On the better farms, small but well-constructed brick houses are being built; the poorer ones have small wooden or unfired brick houses with thatched roofs.

Transport to the farms is a serious limiting factor both for marketing and for bringing supplies to the farms. It also seems to us that most state and collective farms, particularly the latter, had far more labor than was really needed for efficient production.

Agricultural Potential

The people of the Soviet Union have room for vertical expansion on their present farms and for further expansion onto yet undeveloped soils. Barring some catastrophe, Soviet farms will increase production substantially in the years ahead. No doubt they could produce considerable grain for

Texas-Bred Santa Gertrudis Bought by Rhodesian Farmers



Rhodesian farmer D.C. Lilford supervises parading of Santa Gertrudis bull during field day for young farmers on his 23,000-acre farm.

Two shipments of U.S. breeding stock from Texas have introduced the Santa Gertrudis breed into Southern Rhodesia. Both will be used to upgrade African herds, and both were imported by leading cattlemen of the country.

The first shipment arrived 2 years ago—4 bulls and 12 heifers. And the second one, of 4 bulls, came last fall.

Santa Gertrudis are not the only breed being imported from the United States. Purebred Herefords and Brahman are to be found on several Rhodesian farms.

Southern Rhodesia is one of the few areas in Africa in which cattle thrive. Also, its rapidly expanding economy affords a growing market for beef and for dairy products.



Sir Patrick Fletcher and his son John examine calf recently bought in Texas.

export. Their efficiency, however, will depend on further mechanization of the many smaller jobs and a reduction in the farm labor force. More fertilizers, better transport, and more adequate processing of farm products will all be important too.

Members of the U.S. group of soil and water specialists included the fol-

lowing from the U.S. Department of Agriculture: CHARLES E. KELLOGG, Soil Conservation Service; JOSEPH J. BULICK, Foreign Agricultural Service; LEWIS B. NELSON, WILLIAM H. ALLAWAY, and W. W. DONNAN, Soil and Water Research Division, Agricultural Research Service. D. W. THORNE, University of Utah, and M. G. CLINE, Cornell University, were also members.

Monetary Freedom in Europe

(Continued from page 3)

facilities of EPU. The payments were progressively "hardened" and by 1955 were settled 75 percent in gold or dollars and 25 percent in automatic credits.

Western Europe could now begin dismantling its restrictions on imports. At first the process was concentrated on intra-European trade and later was extended to trade from the dollar and other areas. This progressive liberalization greatly facilitated the expansion of trade, of gold and dollar reserves, and consequently of Europe's economies.

Europe's trade has more than doubled since the inception of EPU. Gold and dollar holdings on September 30, 1958, totaled \$20.7 billion, an increase of \$12.6 billion since the end of 1949. The productive capacity of all the countries now exceeds prewar levels.

Although trade barriers were progressively lowered payment for that trade was still shackled by the monetary controls on foreign exchange. These exchange controls represented the weak link in the chain.

New Convertibility Move

In late December 1958, 10 Western European countries¹ greatly strengthened the chain by making their currencies convertible for "nonresidents." An Englishman still cannot freely convert pounds sterling, nor can a Frenchman freely convert francs. These limitations apply equally, of course, to other residents of the same currency area, for instance, the sterling area. They also apply to some countries which have bilateral trade and payments agreements with the 10 Western European countries. Convertibility has not been extended either to movements of foreign investment capital. Exchange controls which in part dictate method and currency of payments and receipts will be maintained for the present by most of the countries concerned.

The important point from the trade standpoint is that the "nonresident"

(e.g., the exporter in another country) is granted the right to convert his unsundered foreign currency earnings. Whether or not he may retain any or all of his export earnings depends on the regulations of his own government, and these vary from country to country. But if his country allows him to retain foreign exchange—many do—he can now also convert it to dollars or any other currency. For example, a Dutch exporter of flower bulbs may convert his earnings of Swedish kroner through a commercial bank in order to buy a car in Britain. He can, of course, freely import only items that are not otherwise restricted.

Europe's convertibility move means an end to EPU. Foreseeing such a move these countries in 1955 pledged themselves to settle payment accounts according to a new set of rules known as the European Monetary Agreement (EMA). Unlike the EPU, the EMA will require deficits to be settled in full and will grant "interim credits" only when member countries have cause to request such assistance.

Another consequence is that these countries will find it more necessary than before to control domestic inflationary pressures. If inflation prices their exports out of the market, their gold and foreign exchange reserves will face the probability of a rapid decline. The successful use of internal financial and monetary measures in such situations was demonstrated last year by the United Kingdom, Belgium, and the Netherlands.

What Is Gained

Here are some of the benefits the new currency freedom will bring:

- It will facilitate further expansion of world trade—an expansion necessary to the further economic growth of the countries of the Free World. Expanded trade and production should mean that competition will become keener in world markets.

- It will facilitate and encourage foreign private investment along with business expansion and more liberal policies on profit remittance.

- It will tend to widen the scope of convertible foreign exchange. Heretofore, payments deficits were largely settled in gold and dollars, and for this reason, a number of countries

New Geography Published On Commodity Production

GEOGRAPHY OF COMMODITY PRODUCTION. By Richard M. Highsmith, Jr., and J. Granville Jensen. Illustrated. 462 pp. Philadelphia: J.B. Lippincott Company. \$6.00

To organize and discuss the world's commodities—defined as those movable materials and things that have economic value—in a single volume is a remarkable achievement, yet that is what the authors of this fine textbook have done. Designed for college students, it should have far wider use as a reference book for economists, researchers, and especially the farm and trade press.

What makes this book so valuable is its all-inclusiveness. There are four major parts: Commodities derived from agriculture, from sea and forest, from mining, and from manufacturing. Each part is introduced by a general discussion, and this is followed by chapters analyzing the important commodities in terms of world significance, production factors, production by nations and regions, and world trade. Statistical tables are generously used, and so are the pictures.

The authors have done a good job on the text. The facts are there, yet the writing is not so burdened with statistics as to be deadening. Much must be said about the format too. The paper is excellent, the type is clear and readable, and the tables large enough to be seen at a glance. An excellent index adds to its usefulness.

treated dollars as "scarce" in administering import controls. Now, however, earnings of the 12 Western European currencies are synonymous with the dollar and no financial reason exists for separate allocations.

- It will facilitate the fulfillment of the promises of further dollar trade liberalization recently made by a number of countries. Since the financial motivation for discrimination by the 10 countries against trade with the dollar area has been removed, U.S. products, should, in due course, be offered greater opportunities to compete freely in the world's markets.

¹ The United Kingdom, France, West Germany, the Netherlands, Belgium, Luxembourg, Italy, Denmark, Norway, and Sweden. Austria and Portugal have since taken similar steps.

New Zealand and the United Kingdom Make Provision for New Trade Pact

A significant development occurred late in 1958 which will greatly influence New Zealand's foreign agricultural trade policy this year. After a long period of negotiation, New Zealand and the United Kingdom signed a communiqué for a trade pact which will be formalized at some future date. In the meantime, the terms outlined are already in force.

This new agreement is welcomed by New Zealand as a means of implementing its current policy of greater trade diversification. Also, it is hoped that this new instrument will provide for more flexibility in trade relations with the United Kingdom, and for freer negotiation with third countries.

The communiqué, which provides the basis for the new pact, was signed by the two governments in November 1958. Revising the Trade Agreement of 1932, both governments agree to certain specified provisions as follows:

1. The United Kingdom assures New Zealand that existing rights of free entry will be maintained and that tariff margins of preference will be continued in the U.K. market on all commodities in which New Zealand has trade interest. For example, the United Kingdom agrees to retain the existing guaranteed margins of tariff preferences on such major New Zealand agricultural export items as dried and evaporated milk, butter, cheese, eggs, honey, sheep casings, dried vegetables, fresh apples and pears, grass and clover seed, tallow, lactose, casein, meat extracts, and certain canned meats. But, if for any reason, the United Kingdom should wish to reduce margins of preference on any of the foregoing items, the U.K. Government is required to consult with the New Zealand Government before action is taken.

2. The United Kingdom grants New Zealand the privilege of reducing tariff margins of preference to 5-10 percent as compared to existing margins of 10-25 percent on certain manufactured goods entering New Zealand from various Commonwealth sources. Under

this provision, New Zealand may reduce its most-favored-nation and general rates on selected items, thereby promoting trade with countries outside of the British Commonwealth. It is expected that these areas may be in Latin America and Africa.

3. New Zealand assures the United Kingdom that it will give tariff protection only to those "industries which are reasonably assured of sound opportunities for success."

4. Under the terms of the communiqué, New Zealand's right to conclude limited bilateral trade arrangements is recognized, provided they do not cause serious harm to U.K. trade, and are used solely for the marketing of the surplus portion of New Zealand production that cannot be absorbed at remunerative prices on the U.K. market.

Privileges granted to New Zealand in certain previous trade negotiations with the United Kingdom will remain in effect. The 1957 Supplementary Agreement providing for annual consultations on agricultural production and marketing policies will not be affected, nor will the unrestricted right of entry into the U.K. market of New Zealand butter, cheese, dried milk, casein, and chilled and frozen pork. New Zealand's 15-year right of exporting meat to the United Kingdom without quantity limitations until 1967 will also operate outside the terms of this new agreement.

Our Fiber Imports

(Continued from page 6)

Indonesia, southern Asia, Africa, and South America. Thailand furnishes more than half of our kapok imports, for which we spend well over \$2 million a year. However, kapok's principal use in life jackets, cushion fillings, insulating materials, and similar products is now meeting competition from man-made fibers and materials.

Broomroot fiber is obtained from the roots of a large bunch grass of

Foreign PRODUCTION NEWS

Frost in **Argentina's** Rio Negro Valley has substantially reduced **pear** prospects this season, but its effect on apples was slight. The Valley produces the bulk of Argentina's export apples and pears. The pear crop is expected to be down about 30 percent, but the apple crop will probably be 10 percent above last season's output.

The first experimental **sugar beet** crop in the Beja areas of **Tunisia** yielded an average of 13 short tons an acre, exceeding all expectations and encouraging planners to pursue further production. Sugar is an important energy item in the Tunisian diet. The yearly per capita consumption ranges between 33 and 44 pounds.

Syria's 1958 **tobacco** crop amounted to about 15 million pounds, 14 percent above 1957 production. Syria's goal is to supply Egypt with at least 11 million pounds of tobacco a year. Sample shipments of Syrian leaf have been satisfactorily tried in Cairo.

Uruguay's 1958-59 **flaxseed** acreage—about 320,000 acres—is down 25 percent from the preceding season and 4 percent from average yearly plantings during 1952-57. Many farmers are shifting from flaxseed to sunflowerseed, corn, and wheat.

Mexico, is stiff and resilient, and makes good scrubbing brushes and stiff whisks. Our imports are small, less than \$10,000 a year.

Many other raw vegetable fibers are imported in negligible quantities, including kenaf (or mesta), sansevieria, Mauritius fiber, phormium fiber, and some lesser known *Agaves*, and some brush fibers. Most of these are made into cordage or coarse woven commodities. Also, some caroá is imported from Brazil for papermaking.

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Canadian Eggs Find Favor in Venezuela

Canada shipped four times as many eggs to Venezuela in the first 9 months of 1958 as in the corresponding period of 1957. Shipments totaled 9.2 million dozen and nearly equaled U.S. shipments of 10.1 million dozen—down 45 percent from 1957.

Venezuelans give several reasons for the recent popularity of Canadian eggs. First, they have a definite price advantage; second, brown eggs, preferred by Venezuelans, are more readily available; also, the Canadian grading system is very strict and permits little tolerance within grades; and Canadian wooden crate packaging deters breakage.

Argentina Moves Toward Larger Livestock Exports

Argentina has taken steps to assure larger exports of livestock products

this year. First, home meat consumption will be cut because of removal of price controls and the resulting sharp rise of domestic prices. Also, all restaurants, hotels, and other eating places are forbidden to serve meat on Mondays and Fridays. Another important action has been a reduction in Argentina's export taxes.

The recent freeing of the Argentine peso should also stimulate exports. The free market rate at the end of the year was 69 pesos to the dollar.

Peru Stops Foreign Sales Of Cottonseed Oilcake

Peru is prohibiting exports of cottonseed oilcake until supplies catch up with demand. The measure resulted from cattlemen's complaints that cottonseed cake producers were shipping most of their output abroad and that badly needed supplies were unavailable in the domestic market.

Yugoslav Export Tobacco Facing More Competition

Although larger quantities of Yugoslav tobacco will be available for export this year, predictions are for exports at about the same level as 1958 totals. Aggravated relations with the Soviet Bloc, increased competition from other producing countries, and price problems will probably prevent expanded exports. Part of Yugoslavia's competition will come from increased exports of Bulgarian tobacco, particularly to Western Europe. Yugoslavia's main tobacco markets are found in France, the Soviet Union, the United States, Poland, West Germany, Italy, and Egypt. But the importance of each varies widely from year to year.

U.S. Meat Imports Mount Sharply

United States imports of meat and meat products in 1958 are estimated to have reached 805 million pounds—109 percent above the total for the preceding year. Most of the increase was in purchases of fresh and frozen beef and veal from New Zealand, Mexico, Canada, Ireland, and Australia. Imports of canned and cured beef from Argentina also rose sharply.